



**From Day Owen**  
**esseneinfo** to: Scott Downey

07/14/2011 12:44 PM

History:

This message has been replied to.

Scott, I just got this email from Jill Bloom. I am pasting it below. In it she refers to having heard about "threats"

having been made and that she hopes my group, Pitchfork, disavows those threats.

I have heard nothing about any threats and am asking you to clarify what she is referring to.

Thanks, Day



**Missing item from Day**  
esseneinfo to: Scott Downey

07/14/2011 12:45 PM

Read my other email in which I forgot to paste the letter from Jill Bloom in which she refers to "threats" and hopes Pitchfork Rebellion "disavows" them.

What threats is she referring to?

Thanks, Mr. Owen. Yes, I have received this and related articles from several sources, and I have been working with EPA Region 10 and ODA to provide information for the upcoming public meeting, particularly some of the Federal-level work that addresses the bigger picture of pesticide drift and should benefit you and your neighbors. I am glad there is some movement now, but I am pained to hear that there have been threats from individuals (if what I heard is true)--aside from being opposed to such tactics, I would hate for any of that to derail progress. I hope the Pitchfork Rebellion disavows any of these distractions from the real work at-hand.

I look forward to hearing how this meeting goes.

Jill Bloom



**Re: From Day Owen**  
esseneinfo to: Scott Downey

07/14/2011 01:38 PM

Good.

See you there!

I think that was just heresay about general threats made about helicopters. None of us our concerned about problems at the meeting. Scott

-----Original Message-----

From: Scott Downey <Downey.Scott@epamail.epa.gov>

To: Day Owen <ESSENEINFO@aol.com>

Sent: Thu, Jul 14, 2011 9:26 am

Subject: Re: From Day Owen

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\*\*\*\*\*

Scott Downey, Manager  
Pesticides and Toxics Unit  
EPA Region 10  
1200 6th Ave, Suite 900, OCE-084  
Seattle, WA. 98101  
(206) 553-0682

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From: esseneinfo  
Sent: 07/14/2011 03:43 PM AST  
To: Scott Downey  
Subject: From Day Owen

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Thanks, Day



## New Atrazine Drift Study Surprise

esseneinfo to: jae.p.douglas, Scott Downey, Richard Kauffman,  
Chad Schulze, seeds.joshua, Jill Bloom

07/14/2011 03:31 PM

History:

This message has been forwarded.

This new drift study is hot off the press.

Atrazine was found to move off target way more by volatilization than by runoff.

More importantly, the off target drift of atrazine and other herbicides was found to dramatically increase if the soil is wet.

As the following Science Daily synopsis of the study describes, the factor of moisture in soil **HAD NOT PREVIOUSLY BEEN FACTORED INTO DRIFT MODELING** and turns out to be the driving factor.

Science News

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### Pesticide Pathways Into the Atmosphere

ScienceDaily (July 12, 2011) – When soil moisture levels increase, pesticide losses to the atmosphere through volatilization also rise. In one long-term field study, U.S. Department of Agriculture (USDA) scientists found that herbicide volatilization consistently resulted in herbicide losses that exceed losses from field runoff.

See Also:

Earth & Climate

- Atmosphere
- Pollution
- Air Quality
- Weather
- Air Pollution
- Environmental Science

Reference

- Infiltration (hydrology)
- Surface runoff
- Soil contamination
- Soil science

Agricultural Research Service (ARS) soil scientist Timothy Gish and ARS micrometeorologist John Prueger led the investigation, which looked at the field dynamics of atrazine and metolachlor, two herbicides commonly used in corn production. Both herbicides are known to contaminate surface and ground water, which was primarily thought to occur through surface runoff.

Gish works at the ARS Hydrology and Remote Sensing Laboratory in Beltsville, Md., and Prueger works at the agency's National Laboratory for Agriculture and the Environment in Ames, Iowa. ARS is USDA's chief intramural scientific research agency, and this work supports the USDA priority of promoting sustainable agriculture.

Many experts believed that volatilization was not a contributing factor to water contamination because atrazine and metolachlor had a low vapor pressure. However, the monitoring of both herbicide volatilization and surface runoff at the field-scale over multiple years had never been done.

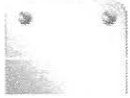
So the team set up a 10-year study in an experimental field in Beltsville that is equipped with remote sensing gear and other instrumentation for monitoring local meteorology, air contaminants, soil properties, plant characteristics, and groundwater quality. This allowed the team to carry out their studies on a well-characterized site where only the meteorology -- and the soil water content -- would vary.

Prueger and Gish observed that when air temperatures increased, soil moisture levels had a tremendous impact on how readily atrazine and metolachlor volatilized into the air, a key factor that had not been included in previous models of pesticide volatilization. When soils were dry and air temperatures increased, there was no increase in herbicide volatilization, but herbicide volatilization increased significantly when temperatures rose and soils were

wet.

Most surprising was that throughout the study, herbicide volatilization losses were significantly larger than surface runoff. When averaged over the two herbicides, loss by volatilization was about 25 times larger than losses from surface runoff.

Email or share this story:



**article on volatilization of pesticides**

Alan Henning to: Scott Downey, Kay Morrison, Elizabeth Allen

07/18/2011 11:35 AM

Attached is an article on volatilization of pesticides. I thought you might be interested in this. The article and the link are below.

Alan

[attachment "At ARS, the Atmosphere Is Right for Air Emissions Studies.mht" deleted by Scott Downey/R10/USEPA/US]

<http://www.ars.usda.gov/is/AR/2011/jul11/emissions0711.htm>

Alan Henning, R.S.

Environmental Protection Specialist

Watershed Unit,

Office of Waters and Watershed, EPA Region 10

165 East 7th Avenue, Suite 100

Eugene, Oregon 97401

541-687-7360

Henning.Alan@epa.gov





**Fw: New Atrazine Drift Study Surprise**

**Scott Downey** to: Schulze.Chad, Linda Liu, Erin Halbert, Sheila  
Fleming, Elizabeth Allen, Andrea LaTier, David  
Powers, Alan Henning, Harold Rogers, Kay

07/18/2011 01:43 PM

in case you didn't see this message from Day Owen ...

~~~~~  
Scott Downey, Manager  
Pesticides and Toxics Unit  
US EPA Region 10  
1200 6th Ave, Suite 900, OCE-084  
Seattle, WA 98101-3140  
(206) 553-0682

----- Forwarded by Scott Downey/R10/USEPA/US on 07/18/2011 01:43 PM -----

From: esseneinfo@aol.com  
To: jae.p.douglas@state.or.us, Scott Downey/R10/USEPA/US@EPA, Richard  
Kauffman/R10/USEPA/US@EPA, Chad Schulze/R10/USEPA/US@EPA,  
seeds.joshua@deq.state.or.us, Jill Bloom/DC/USEPA/US@EPA  
Date: 07/14/2011 03:31 PM  
Subject: New Atrazine Drift Study Surprise

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**See Also:**

**Earth & Climate**

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*Email or share this story:*





**question re: citizen request**

**Karen BISHOP** to: Elizabeth Allen, Bruce A Pokarney,  
chris.bayham, David G FARRER, dmitchel,  
Scott Downey, Grant S Smith, Greg PETTIT,

07/18/2011 04:59 PM

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History: This message has been replied to.

Hi there,

I've received a few inquiries from Triangle Lake citizens asking for the name, agency, position, and contact information of everyone from the agencies who attended last Thursday night's meeting. I would like to be timely in my response, so I'm giving you all a heads-up, and asking if you have any reason why not openly provide that information? -Karen